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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/079,345 | 02/20/2002 | Byung Sun Hwang | 035759-000001 | 7945 |
| 28722 | 7590 | 01/07/2004 | EXAMINER | |
| BRACEWELL & PATTERSON, L.L.P. P.O. BOX 969 AUSTIN, TX 78767-0969 | | | FLANDRO, RYAN M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3679 | |

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|----------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/079,345 | HWANG, BYUNG SUN |
| | Examiner Ryan M Flandro | Art Unit 3679 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 October 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,4,5,8,10-12,14,15 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,4,5,8,10-12,14,15,18 and 19 is/are rejected.
- 7) Claim(s) 20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Applicant's election **without** traverse of group II (figures 6-10) in Paper No. 8 is acknowledged. The requirement is thus deemed proper and is therefore made **FINAL**. Claims 3, 6, 7, 9, 13, 16 and 17 have been cancelled by the Applicant.

Claim Rejections - 35 USC § 102

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hipshire (US 5,735,310).

a. Claim 1. Hipshire shows and discloses end posts **2** having a plurality of rail openings **12** located on facing surfaces of the end posts **2**; rails **40** extending between and terminating (see figure 4) in the rail openings **12** such that the rails **40** are fully supported by the end posts **2** within the rail openings **12**; panels **50** mounted directly to and fully supported only by the rails **40**; and pucks **3** for joining the rails **40** and the panels **50** together, and wherein the pucks **3** are void of threaded fasteners (see figures 1, 2, 4 and 5 and corresponding text in the written disclosure).

b. Claim 2. Hipshire further shows and discloses the end posts **2** and panels **50** are generally vertically oriented, and the rails **40** are generally horizontally oriented, and the

pucks **3** extend horizontally between the rails **40** and the panels **50** (see figures 1, 2, 4 and 5).

Claim Rejections - 35 USC § 103

4. Claims 4, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipshire, as applied above, in view of Montgomery (US 4,289,302).
 - a. Claim 4. Hipshire discloses that each of the posts **2**, rails **40**, and panels **50** are formed from the same type of material (plastic preferably) (see column 1 lines 61-64) but fails to disclose that the material can be reinforced concrete. Reinforced concrete fences wherein the various components are made out of reinforced concrete are well known in the art as evidenced by Montgomery (see e.g., column 2 lines 54-56). Furthermore, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use reinforced concrete rather than plastic depending upon the particular application and/or environment of the fence assembly as taught by Montgomery.
 - b. Claim 5. Hipshire shows the rail openings **12** in each post comprise a notch located at one end of the post **2** (e.g. the top opening **12**) but does not show a blind hole located adjacent to an opposite end of the post **2**. Montgomery, however, teaches that rail openings **4 or 6** are commonly blind holes when the rail **2** is not meant to extend through the entire post **1** (see figures 2, 2a, 3a, 4 and 4a). It would have been obvious to one

having ordinary skill in the art at the time the invention was made to make the rail opening **12** at an opposite end of the post **2** a blind hole since the rails **40** in Hipshire do not extend through the post **2** as taught by Montgomery.

c. Claim 8. The combination of Hipshire and Montgomery further may include a bond located between the end posts **2**, rails **40**, and panels **50** to form a more rigid structure, wherein the bond is an adhesive (see Montgomery figure 6b; column 3 line 44 – column 4 line 2).

5. Claims 10, 11, 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipshire, as applied above, in view of Driscoll et al. (US 6,311,957) (Driscoll).

a. Claim 11. Hipshire shows and discloses a plurality of end posts **2**, each having a pair of upper rail openings **12** located on one end of the end posts **2**, and a pair of lower rail openings **12** located adjacent to an opposite end of the end posts **2**, wherein the upper and lower rail openings **12** are located on facing surfaces of the end posts **2**; an upper rail **40** extending between each adjacent pair of the end posts **2**, wherein the upper rails **40** terminate in the upper rail openings **12** such that the rails **40** are fully supported by the end posts **2** within the upper rail openings **12**; a lower rail **40** extending between each adjacent pair of the end posts **2**, wherein the lower rails **40** terminate in the lower rail openings **12** such that the rails **40** are fully supported by the end posts **2** within the lower rail openings **12** (see Hipshire figures 1, 2, 4 and 5). Hipshire further shows and discloses a plurality of panels **50** mounted directly to and fully supported by only the rails **40**; a plurality of openings in each of the upper and lower rails **40** and the panels **50**,

wherein axially adjacent ones of the openings are coaxial; and a plurality of pucks **3** extending between the coaxial openings and securing the panels **50** to the rails **40** (see figures 1, 2, 4 and 5 and corresponding text in the written disclosure).

- i. Hipshire lacks disclosure of inserts mounted in each of the openings.
 - ii. Driscoll, however, teaches the use of mounting inserts **20** in openings **15** to enable connections wherein the member inserted into the insert is non-circular (see figures 1 and 2b). This allows simple construction because a standard drill sized for the insert may still be used.
 - iii. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inserts mounted in the each of the openings of Hipshire to allow for connections using non-circular pucks as taught by Driscoll.
- b. Claim 12. Hipshire further shows and discloses the end posts **2** and the panels **50** being generally vertically oriented and the rails **40** being generally horizontally oriented, and the pucks **3** extending horizontally between the rails **40** and the panels **50** (see Hipshire figures 1, 2, 4 and 5).
- c. Claim 10. Hipshire, as applied to claim 1 above, further shows and discloses the pucks **3** mounted in facing surfaces of the rails **40** and the panels **50** such that associated ones of the pucks **3** extend between adjacent openings in the rails **40** and panels **50** (see figures 1, 2, 4, and 5).
- i. Hipshire lacks disclosure of inserts located in each of the rails **40** and the panels **50** for receiving the pucks **3**.

- ii. Driscoll, however, teaches the use of mounting inserts **20** in openings **15** to enable connections wherein the member inserted into the insert is non-circular (see figures 1 and 2b). This allows simple construction because a standard drill sized for the insert may still be used.
 - iii. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inserts mounted in the each of the openings of Hipshire to allow for connections using non-circular pucks as taught by Driscoll.
- d. Claim 19. Hipshire shows and discloses a plurality of end posts **2**, each having a pair of upper rail openings **12** located on one end of the end posts **2**, and a pair of lower rail openings **12** located adjacent to an opposite end of the end posts **2**, wherein the upper and lower rail openings **12** are located on facing surfaces of the end posts **2**; an upper rail **40** extending between each adjacent pair of the end posts **2**, wherein the upper rails **40** terminate in the upper rail openings **12** such that the rails **40** are fully supported by the end posts **2** within the upper rail openings **12**; a lower rail **40** extending between each adjacent pair of the end posts **2**, wherein the lower rails **40** terminate in the lower rail openings **12** such that the rails **40** are fully supported by the end posts **2** within the lower rail openings **12** (see figures 1, 2, 4 and 5 and corresponding text in the written disclosure). Hipshire further discloses a plurality of panels **50** mounted directly to and fully supported by only the rails **40**, wherein the panels **50** and the rails **40** have vertical facing surfaces that abut each other, and pucks **3** for joining the rails **40** and the panels **50**

such that the pucks **3** are void of threaded fasteners for securing the panels **50** to the rails **40**.

i. Hipshire lacks disclosure of inserts located in each of the rails **40** and in each of the panels **50**, wherein axially adjacent ones of the inserts extend horizontally toward each other in a coaxial relationship.

ii. Driscoll, however, teaches the use of mounting inserts **20** in openings **15** to enable connections wherein the member inserted into the insert is non-circular (see figures 1 and 2b). This allows simple construction because a standard drill sized for the insert may still be used.

iii. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inserts mounted in the each of the openings of Hipshire such that axially adjacent ones extended horizontally toward each other in a coaxial relationship to allow for connections using non-circular pucks as taught by Driscoll.

6. Claims 14, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hipshire and Driscoll, as applied above, further in view of Montgomery.

a. Claim 14. Hipshire discloses that each of the posts **2**, rails **40**, and panels **50** are formed from the same type of material (plastic preferably) (see column 1 lines 61-64) but fails to disclose that the material can be reinforced concrete. Driscoll also lacks such disclosure. Reinforced concrete fences wherein the various components are made out of reinforced concrete are, however, well known in the art as evidenced by Montgomery

(see e.g., column 2 lines 54-56). Furthermore, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use reinforced concrete rather than plastic depending upon the particular application and/or environment of the fence assembly as taught by Montgomery.

b. Claim 15. Hipshire shows the rail openings **12** in each post comprise a notch located at one end of the post **2** (e.g. the top opening **12**) as well as pucks **3** mounted in facing surfaces of rails **40** and panels **50**. As set forth above, Driscoll teaches the use of inserts **20**. The combination of Hipshire and Driscoll does not include a blind hole located adjacent to an opposite end of the post **2**. Montgomery, however, teaches that rail openings **4 or 6** are commonly blind holes when the rail **2** is not meant to extend through the entire post **1** (see figures 2, 2a, 3a, 4 and 4a). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the rail opening **12** at an opposite end of the post **2** a blind hole since the rails **40** in Hipshire do not extend through the post **2** as taught by Montgomery.

c. Claim 18. The combination of Hipshire, Driscoll and Montgomery further may include a bond located between the end posts **2**, rails **40**, and panels **50** to form a more rigid structure, wherein the bond is an adhesive (see Montgomery figure 6b; column 3 line 44 – column 4 line 2).

Allowable Subject Matter

7. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art, including Hipshire, Driscoll, Montgomery, Lyman, and Ferris, either alone or in combination, fails to disclose or teach the inserts located in the rails protruding outward from the vertical facing surfaces of the rails.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to rail and panel fencing systems:

U.S. Patent 4,477,058 to Lowery (see figures 1, 3, and 4)

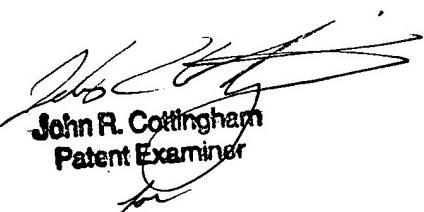
U.S. Patent 4,200,260 to Dailey et al. (see figure 10)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 8:30am - 5:30pm Mon-Fri.

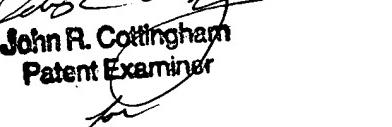
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

RMF
December 24, 2003



John R. Cottingham
Patent Examiner



Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3670